

Abstract ID : 367

Title : The risk of boat disturbance and boat strikes to dugongs: observations using blimp-cam

Category : Conservation

Student : Doctoral

Preferred Format : Oral Presentation

Abstract : The behaviour of dugongs in Moreton Bay, near Brisbane, was observed using a remote video camera mounted on a tethered, helium-filled balloon (blimp-cam) at a height of 50m. Using a remote control, I used this equipment to scan large herds of dugongs and to follow focal individuals for set periods of time. To assess the risks of boat disturbance and boat strikes, the behaviour of the dugongs was observed while boats were passing opportunistically (eg. recreational boats using the area) and during experimental trials. Observations of boats passing opportunistically at a range of speeds showed that dugongs have a delayed response to boats and thus are particularly vulnerable to being hit by boats travelling fast. During the experimental trials, an aluminium dinghy with a 20 HP engine was driven past the edge of a dugong herd within the regulated speed limit, either once or five times to determine whether repeated passes caused a higher level of disturbance. No significant relationships were found between the distance of the boat from the focal animal and the duration, distance, or direction of its subsurface behaviour. The percentage of time spent feeding and travelling by individual dugongs over a 4.5 min interval was also unaffected by the boat's passing, the number of passes made, or the focal individual's position in the herd relative to these two factors. Thus any response to the boat was delayed and short. These results suggest the risk of vessel strike is greater than the risk of disturbance and support the use of speed restrictions for boats in important dugong areas. The blimp-cam footage provides graphic proof of the risk of vessel strike to dugongs and has a potential role in public education and policy development.